

Frye, Kathy M

From: Kenneth Learned [klearned@mvmddistrict.org]
Sent: Monday, September 12, 2011 3:45 PM
To: Frye, Kathy M
Cc: 'Brian N. Passaro'; Aparicio, Richard
Subject: Tule Management Plan Comments
Attachments: Tule Management Comments.pdf

Hi Kathy

Attached here are the Mosquito and Vector Management District's comments for the Bird Refuge Tule Management Plan. I apologize for not getting them back to you sooner since we spoke a couple of months ago, but the MVMD does strongly support your plan.

Kenneth Learned, Operations Manager
Mosquito and Vector Management District of Santa Barbara County
(805) 969-5050 ext. 225

**COMMENTS ON CITY OF SANTA BARBARA'S
VEGETATION MANAGEMENT PLAN FOR THE ANDREE CLARK BIRD REFUGE
BY
MOSQUITO AND VECTOR MANAGEMENT DISTRICT OF SANTA BARBARA COUNTY**

Fifty-two species of mosquitoes occur in California. Fifteen species occur in southern Santa Barbara County. Of these 15 species of mosquitoes, at least 12 breed or are capable of breeding at the Andree Clark Bird Refuge.

During the warm months of the year, the predominant mosquito species at the Andree Clark Bird Refuge is the Tule Mosquito (*Culex erythrothorax*). This species usually makes up over 99% of the mosquito population at the Bird Refuge. As the name implies, it breeds in very dense vegetation, especially tule vegetation. The only other mosquito species to occur in significant numbers during the summer months is the Encephalitis Mosquito (*Culex tarsalis*). Both of these species are very serious vectors of West Nile Virus and other mosquito-borne viruses. The two species were responsible for 100% of the West Nile Virus positive live mosquito samples collected in Santa Barbara County during the 2005 West Nile Virus outbreak, when Santa Barbara County had some of the highest West Nile Virus levels in California.

1. Floodwater Mosquitoes (*Aedes washinoi*) are quite abundant in winter and spring. This mosquito species has a somewhat different biology than most mosquito species. It is univoltine, that is, it has one generation per year. Eggs are laid on the ground and on emergent vegetation during springtime. The eggs remain dormant through the dry season then hatch en masse when the seasonal wetland is flooded by winter rains, or in the case of the Bird Refuge, when the level of the water raises following winter rains. Though they have never been documented as disease vectors, adult female Floodwater Mosquitoes are vicious and aggressive day and night biters that can cause serious nuisance mosquito issues.

The Mosquito and Vector Management District of Santa Barbara County (MVMD) conducted the first mosquito trapping survey at the Bird Refuge in early summer 2006. Up to 1,000,000 individual mosquitoes per night were trapped at times. Dense vegetation (i.e. tules) provides the mosquito larvae with protection from fish and other predators. High levels of organic matter in the water provide excellent nutrition for mosquito larvae which filter feed on the organic matter.

2. The MVMD applies a granular mosquito larvicide to the tules stands using a gasoline-powered granular applicator from either a boat or from shore. In some areas of the Bird Refuge tules are so dense that the mosquito larvicide may not be penetrating down into the water. If the larvicide fails to reach the water, control of the mosquito larvae will not be achieved and the time, effort, and money expended to do the application will be wasted.

3. Tules, consisting of Bullrush (*Scirpus* sp.) and Cattail (*Typha* sp.), are densest in the northwest corner of the Bird Refuge. This also coincides with the highest number of mosquitoes per trap during trapping surveys. The Santa Barbara Zoo, located at the west end of the Bird Refuge, is severely impacted by

mosquito outbreaks. It should also be mentioned that during the summer the Zoo shows children's movies and hosts other events such as the Fiesta Dignitarios party outdoors after dark when mosquitoes are most active. In view of the species of mosquitoes and the numbers present at these times, a significant risk for mosquito-borne disease transmission exists.

4 The MVMD has always promoted ongoing vegetation management as the best way to maintain control of mosquito populations. An example would be the tule management performed by the City of Goleta at Lake Los Carneros 2-3 years ago. The need for applications of mosquito larvicide was substantially reduced in the following 2 years. The MVMD therefore supports the City of Santa Barbara's plan to remove or thin areas of tules, particularly in the northwest section of the Bird Refuge. Also, in areas where dense tule thickets are not being removed (i.e. the southeast corner), it will help greatly if channels from the lagoon into the center of the thickets can be provided. This will allow mosquito control technicians in small boats to apply mosquito larvicide in the thicket.

5 One caveat with the plan as discussed is that if new areas of tules are planted and allowed to become extremely dense, then the project's contribution to mosquito management could be nullified. The MVMD wants to stress that ongoing management of the tules (i.e. keeping tule stands thinned out) is the real key to long term mosquito control.

Sincerely,

Kenneth W. Learned, Operations Manager/District Biologist
Mosquito and Vector Management District of Santa Barbara County
(805) 969-5050 ext. 225
klearned@mvmdistrict.org



City of Santa Barbara
Parks and Recreation

Memorandum

DATE: September 14, 2011
TO: Kathy Frye, Natural Areas Planner
FROM: Cathy Carpenter, City Tennis Coordinator
RE: MST2011-00315, 1414 Park Place Culvert

1 As Tennis Coordinator for the City Parks and Recreation Department for the past 12 years, I have dealt with the inevitable flooding of tennis courts during heavy winter rains. The Old Coast Rd. culvert runs along the courts at the Municipal Tennis Facility and contains so much vegetation that when it rains water flow is impeded causing mud and debris to overflow it's bank and drain onto the courts. This creates a mess that may take several days to clean up; classes have been cancelled due to safety concerns for the patrons and additional expense required for the cleanup. We have also received complaints in the past from patrons regarding the need for additional mosquito abatement.

2
3 I am completely supportive of this project and believe it will contribute greatly to the improvement of court and facility maintenance at the Municipal Tennis Facility as well as enjoyment by the public.

Frye, Kathy M

From: Frye, Kathy M
Sent: Wednesday, September 14, 2011 4:28 PM
To: 'Chris Shaeffer'
Cc: Zachary, Jill; Escobar, Santos; Hubbell, Jan
Subject: RE: Clark Bird Refuge project

Greeting Chris,
Channel clearing will occur within City of Santa Barbara property in the Andree Clark Bird Refuge and will not extend into the Union Pacific or Caltrans right of way (ROW), south of Highway 101. The culvert clearance along Old Coast Highway is also within City property boundaries and does not extend into the Caltrans ROW. Please let me know if you need additional clarification or maps.

Thank you,

Kathy Frye
Natural Areas Planner
City of Santa Barbara Parks and Recreation Box 1990, Santa Barbara, CA 93102
PH (805) 897-1976
kfrye@SantaBarbaraCa.gov

-----Original Message-----

From: Chris Shaeffer [mailto:chris_shaeffer@dot.ca.gov]
Sent: Wednesday, September 14, 2011 4:24 PM
To: Frye, Kathy M
Subject: Clark Bird Refuge project

Kathy,

Hello from Caltrans District 5 in San Luis Obispo.

I'm reading thru the MND for the subject project, but its not entirely clear to me if the project proposes working in those culvert areas which lie in the Caltrans right of way. For that portion of the culvert clean out within the sanctuary area, how far toward the freeway does the project anticipate to clear?

And then on the opposite side, where the tennis courts are located, does the project anticipate any maintenance / clean out work into the Caltrans' culverts?

Thanks.

Chris Shaeffer
Caltrans Dist 5
Development Review
(805) 549.3632

**1400-1700 E. CABRILLO BOULEVARD AND 1414 PARK PLACE
ANDREE CLARK BIRD REFUGE VEGETATION MAINTENANCE AND HABITAT
RESTORATION PROJECT**

FINAL MITIGATED NEGATIVE DECLARATION

RESPONSE TO COMMENTS

NOVEMBER 3, 2011

INTRODUCTION:

An Initial Study was prepared for the 1400-1700 E. Cabrillo Boulevard and 1414 Park Place, Andree Clark Bird Refuge Vegetation Maintenance and Habitat Restoration project because the California Environmental Quality Act (CEQA) requires that an environmental assessment of the proposed project be provided. The environmental analysis determined that the proposed project could potentially have significant adverse impacts related to *biological resources, cultural resources, noise, public services and water environment*; however, mitigation measures described in the Initial Study and agreed to by the applicant would reduce potential impacts to less than significant levels. In addition, recommended mitigation measures were identified to further reduce less than significant impacts associated with *air quality and transportation* issues.

A Draft Mitigated Negative Declaration (MNO) was prepared for the proposed project, and a public review period was held from September 13 to October 13, 2011. Comment letters were received from the following agencies and members of the public during the comment period:

1. Mosquito and Vector Management District of Santa Barbara County
2. State of California, Department of Transportation (Caltrans)
3. City Tennis Coordinator, City of Santa Barbara, Parks and Recreation Department
4. US Fish and Wildlife Service Meeting Summary

Responses to the comments received from the public and the Planning Commission regarding the Draft MND are provided below, and the comment letters received are attached.

The purpose of this document is to respond to specific comments received pertaining to environmental issues in the Draft MND. While letters of general support or opposition to the project are acknowledged and included in this document for the record, no formal response is provided. In addition, comments received not related to the environmental issues outlined in the Draft MND, such as land use issues and social or fiscal impacts of the project, are outside the scope and not addressed in this document. However, all comments will be forwarded to the Planning Commission for consideration.

Letter No.1

Mosquito and Vector Management District of Santa Barbara County (MVMD)

September 12, 2011

1-1. Comment: The MVMD provided information regarding the number of mosquito species, life history, breeding seasons, habitat and mosquito-borne viruses. Up to 1,000,000 individual mosquitoes per night have been trapped at the Bird Refuge. Dense vegetation (i.e. tules) provides mosquito larvae with protection from fish and other predators.

Response: The proposed project will remove and thin tules and provide open waterways that will allow fish to access mosquito larvae. This is anticipated to help control the mosquito population by preventing breeding in tules, removing prime larvae habitat and opening dense areas for fish to gain access to eat larvae.

1-2. Comment: The MVMD applies larvacide to tules stands from boat or shore. Some areas of tules are so dense that larvacide may not be penetrating down into the water. If the larvacide fails to reach the water, control of the mosquito larvae will not be achieved and the time, effort and money expend to do the application will be wasted.

Response: Early in project description development, staff discussed the proposed project with MVMD. MVMD provided suggestions for vector control access in the southeast corner. The Department included those suggestions in the project description. The project will remove tules to allow MVMD to gain access into dense vegetation stands, including the southeast area of the Bird Refuge. These open areas will also allow larvacide to penetrate the water column, saving time, effort and money.

1-3. Comment: Bulrush and cattails are densest in the northwest corner of the Bird Refuge, near the Santa Barbara Zoo, and coincides with the densest number of mosquitoes during trapping surveys. The Zoo hosts evening events, when mosquitoes are most active, and a significant risk for mosquito-borne disease transmission exists.

Response: The proposed project includes vegetation removal between the western island and the shore, near the Santa Barbara Zoo. This area accounts for the largest portion of vegetation removal, or 0.56 acres out of 0.86 acres of emergent vegetation. Vegetation removal in the western area of the Bird Refuge will help remove mosquito habitat and reduce exposure of humans to mosquito borne illness.

1-4. Comment: MVMD supports the Department's project in the northwest and also in the southeast corner of the Bird Refuge. MVMD stated it would help greatly if channels from the lagoon (Bird Refuge) into the center of the thicket in the southeast corner were provided so mosquito technicians in boats could apply larvacide to the area.

Response: As previously stated, Department staff discussed the proposed project with MVMD. MVMD suggested channels in the southeast corner of the Bird Refuge. The project description includes channels for vector control access in that location.

1-5. Comment: MVMD expressed concerns regarding restoration planting. If new vegetation was allowed to become extremely dense, then the project contributions (vegetation removal) to mosquito management would be nullified. MVMD states that ongoing management of tules, keeping them thinned, is the key to long term mosquito control.

Response: The Department applied for permits for up to a five-year maintenance period, or whatever time length agencies would allow up to that limit. The project includes repeat vegetation removal over that period in order to keep areas open and free of vegetation to allow the circulation of water and for vector control. Also, the Department does not plan on overplanting within restoration areas.

Letter No.2 (email)

Chris Shaeffer, CALTRANS

September 14, 2011

2-1. Comment: It is unclear if the project proposes working in those culvert areas that lie within the Caltrans right of way, for the portion of the culvert clean out within the “sanctuary” area. How far toward the freeway does the project anticipate to clear?

Response: Channel clearing will occur within City of Santa Barbara property within the Andree Clark Bird Refuge and will not extend into the Union Pacific or Highway 101/Caltrans right of way.

2-2. Comment: On the opposite side, near the tennis courts, does the project anticipate any maintenance/clean out work into the Caltrans culverts.

Response: Culvert clearing along Old Coast Highway will occur within City of Santa Barbara property and will not extend into the Caltrans right of way.

Letter No. 3

City Tennis Coordinator

September 14, 2011

3-1. Comment: The Old Coast "Rd" culvert runs along the courts at the Municipal Tennis Facility and contains so much vegetation that when it rains water flow is impeded, causing mud and debris to overflow its bank and drain onto the courts. This creates a mess that may take several days to clean up; classes have to be cancelled due to safety concerns for the patrons and additional expense required for cleanup.

Response: The proposed project includes removal of the vegetation, sediment and debris that currently exists in the man-made drain. The Department plans to keep the area free of sediment and vegetation for the duration of the five-year permit period. In the short and long-term, the clean culvert should aid in the flow of water in the vicinity, keeping the potential for sediment on the court and the cost of clean-up at a minimum.

3-2. Comment: We have also received complaints in the past from patrons regarding the need for additional mosquito abatement.

Response: Currently, there is standing water in the culvert along Old Coast Highway. Mosquitoes breed in standing water. The removal of the sediment should alleviate this problem by providing a clear path for the water to flow through the culvert and prevent standing water where mosquitoes can breed.

3-3. Comment: I am completely supportive of this project.

Response: Support noted.

Letter No. 4

US Fish and Wildlife Service (USFWS) Meeting Summary

September 28, 2011

4-1. Comment: City of Santa Barbara staff and the Department's biological consultant met with Chris Dellith, USFWS on September 28, 2011 to discuss tidewater goby, the pending consultation between the USFWS and the US Army Corps of Engineers (Corps), and the biological assessment, Exhibit F of the IS/DMND. Mr. Dellith provided comments regarding recent tidewater goby habitat discoveries (unpublished), including evidence that tidewater goby breeding may have occurred in absence of a sandy substrate. Mr. Dellith believes the project will result in an adverse effect and, due to potential take of the species, the project will require consultation between the USFWS and Corps. The project, however, is not likely to jeopardize the tidewater goby, meaning it wouldn't be expected to directly or indirectly reduce appreciably the likelihood of both the survival and recovery of the tidewater goby or modify crucial habitat to the point of preventing the recovery of the species.

Response: The literature currently states that tidewater goby requires a sandy substrate for breeding. The Bird Refuge has a "mucky" bottom. In light of the new information provided by Mr. Dellith, particularly information regarding breeding substrate, staff and the Department's consultant agree that the project will result in an adverse, but not significant, effect on the tidewater goby. The biological assessment and Final MND (FMND) have been revised to reflect the USFWS comments and their desire for the applicant to pursue a consultation for an incidental take statement. It is noted that the project impact to endangered species, specifically tidewater goby, in Section 3a. Biological Resources, Draft MND was potentially significant but mitigable and remains the same as no new information has been presented that substantial permanent impacts to the species or its habitat would occur after mitigation. .

4-2. Comment: Mr. Dellith suggested that, in order to determine a baseline population for the tidewater goby, some type of extrapolation be completed for the project, possibly by field or desktop review. A population baseline would be crucial in determining the level of incidental take that would occur during project implementation.

Response: The Department's biological consultant, a fisheries biologist, conferred with tidewater goby experts and performed a population extrapolation from the existing field information, including but not limited to, field results from the April 2011 protocol tidewater goby survey. The analysis, extrapolated population and number of tidewater gobies expected to be within the project area is outlined in the revised biological assessment, Exhibit F of the FMND. The discussion in the Final MND has been revised to reflect the results of the extrapolation.

4-3. Comment: Mr. Dellith discussed existing and potential permit conditions including the timing of work, monitors and the potential for exclusion of tidewater goby from the work area with a seine.

Response: Conditions for timing of work are already included in the IS/DMND for avoidance of birds protected under the Migratory Bird Treaty Act (MBTA). The bird avoidance timing coincides with the time to avoid tidewater goby breeding. As a condition was already in effect for avoidance during that time period, wording was changed to reflect that these limitations also specifically protect the tidewater goby. Similarly, conditions for bird monitors and tidewater goby monitors currently exist in the IS/DMND and wording was changed to clarify that the tidewater goby monitor will monitor all operations in the bird refuge associated with the project. Specifics were also added to the monitoring language making it clear that the monitor has the authority to stop work if they believe impacts to tidewater goby would exceed those permitted by USFWS.

The exclusion of fish from the project area with nets or seine was considered prior to discussions with the USFWS. No measures were included then, or now, due to the physical difficulty, or impossibility, of accomplishing that task. The challenges of that type of condition were explained to Mr. Dellith during the meeting and described in the revised biological assessment, Exhibit F, FMND. A net could be lowered in the water from a boat but there would be no place to attach the end of the net and close it to capture or to prevent tidewater gobies from escaping. With no way to close off the area, there would be no way to create an exclusion from the emergent vegetation in the project area. Also, the biological consultant conferred with Camm Swift, a tidewater goby expert. Camm Swift stated that, in recent surveys of a stream with dense vegetation and more open areas, the tidewater goby was only observed in the open areas.